

ABSTRACT OF THE DISCLOSURE

A pattern inspection apparatus comprises an illumination optics applying a first inspection light on a predetermined wavelength to a surface opposite to a pattern formed surface of the substrate, and a second inspection light whose wavelength is equal to the wavelength of the first inspection light to the pattern formed surface, a detector independently detecting a transmitted light from the substrate by irradiation of the first inspection light and a reflected light from the substrate by irradiation of the second inspection light, and a space separation mechanism provided in the vicinity of an optical focal plane toward the pattern formed surface, and spatially separates an irradiation area of the first and second inspection lights such that the transmitted and reflected lights from the substrate are imaged in two discrete areas separated on the optical focal plane.